CLAIMS

1. A method of managing the changing of channels between a communications network and at least one network equipment (MS-i), characterized in that after setting up a connection for sending and/or receiving data on a first channel (C1) between said network and said network equipment (MS-i), said network equipment (MS-i) is sent a message on said first channel (C1) instructing it to continue said connection on a second channel (C2) and to maintain said first channel (C1) until it receives data and/or acknowledgments of data from said equipment (MS-i) on said second channel (C2), whereupon the resources associated with said first channel (C1) are released.

2. A method according to claim 1, characterized in that, in the case of sending data to the equipment (MS-i), the sending of the data to said network equipment (MS-i) on said first channel (C1) and said second channel (C2) continues until data and/or acknowledgments of data are received from said network equipment (MS-i) on said second channel (C2).

3. A method according to claim 1, characterized in that said message is repeated on said first channel (C1) a chosen number of times in accordance with a chosen time scheme.

4. A method according to claim 3, characterized in that the number of repetitions is chosen as a function of a required success rate and/or a measured error rate.

5. A method according to claim 3, characterized in that said time scheme is a periodic scheme.

6. A method according to claim 5, characterized in that the message repetition period is chosen to prevent correlation between error rates associated with two

consecutive messages.

7. A method according to claim 1, characterized in that a time is determined that enables channel change messages to reach said network equipment (MS-i) ahead of time by an amount at least equal to the time necessary for the network equipment (MS-i) to change channel, and the sending of data on said first channel (C1) and said second channel (C2) is deferred by an amount that is a function of said time.

8. A method according to claim 7, characterized in that said time is also a function of the data bit rates and/or data sending speeds of said first channel (C1) and said second channel (C2).

9. A method according to claim 3, characterized in that the message is repeated said chosen number of times until acknowledgments of data are received from said network equipment (MS-i) on said second channel (C2).

10. A method according to claim 3, characterized in that the message is repeated said chosen number of time periods whilst observing said network to detect any change of behavior of the network equipment (MS-i) to which said message is sent.

11. A method according to claim 10, characterized in that the detected change of behavior of the network equipment (MS-i) consists in receiving data from said network equipment (MS-i) on said second channel (C2).

12. A method according to claim 10, characterized in that a detected change of behavior of the network equipment (MS-i) consists in detecting variation in a parameter chosen in a group comprising at least a change of mode of operation parameter, a frequency, a position, and

reception of acknowledgments.

13. A system (D) for managing the changing of channels between a network controller (BSCn) and at least one network equipment (MS-i) in a communications network, which system is characterized in that it includes management means (M) adapted, in the event of setting up a connection for sending and/or receiving data on a first channel (C1) between said network controller (BSCn) and said network equipment (MS-i), to request said network controller (BSCn): i) to send said network equipment (MS-i) a message on said first channel (C1) instructing it to continue said connection on a second channel (C2) and to maintain said first channel (C1) until it receives data and/or acknowledgments of data from said equipment (MS-i) on said second channel (C2), and ii) to release the resources associated with said first channel (C1) on receiving said data and/or said acknowledgments of data.

14. A system according to claim 13, characterized in that, in the case of sending data to the equipment (MS-i), said management means(M) are adapted to request said network controller (BSCn) to continue to send data to said network equipment (MS-i) on said first channel (C1) and said second channel (C2) until it receives data and/or acknowledgments of data from said network equipment (MS-i) on said second channel (C2).

15. A system according to claim 13, characterized in that said management means (M) are adapted to repeat said message on said first channel (C1) a chosen number of times in accordance with a chosen time scheme.

16. A system according to claim 15, characterized in that said management means (M) are adapted to choose the number of repetitions as a function of a required success rate and/or a measured error rate.

17. A system according to claim 15, characterized in that said time scheme is a periodic scheme.

18. A system according to claim 17, characterized in that said management means (M) are adapted to determine the message repetition period to prevent correlation between error rates associated with two consecutive messages.

19. A system according to claim 13, characterized in that said management means (M) are adapted to determine a time enabling change of channel messages to reach said network equipment (MS-i) ahead of time by an amount at least equal to the time necessary for the network equipment (MS-i) to change channel and then to instruct said network controller (BSCn) to defer the sending of data on said first channel (C1) and said second channel (C2) by an amount that is a function of said time.

20. A system according to claim 19, characterized in that said management means (M) are adapted to determine said time also as a function of data bit rates and/or data sending speeds of said first channel (C1) and said second channel (C2).

21. A system according to claim 15, characterized in that said management means (M) are adapted to repeat the message said chosen number of times until they receive acknowledgments of data from said network equipment (MS-i) on said second channel (C2).

22. A system according to claim 15, characterized in that said management means (M) are adapted to repeat the message said chosen number of times and substantially simultaneously to observe said network to detect any change of behavior of the network equipment (MS-i) to which said message is sent.

23. A system according to claim 22, characterized in that said management means (M) detect a change of behavior of the network equipment (MS-i) in the event of receiving data from said network equipment (MS-i) on said second channel (C2).

24. A system according to claim 22, characterized in that said management means (M) detect a change of behavior of the network equipment (MS-i) in the event of variation of a parameter chosen in a group comprising at least a change of mode of operation parameter, a frequency, a position, and reception of acknowledgments.

25. A network controller (BSCn) of an access network (RAN) of a communications network, characterized in that it includes a system (D) according to claim 13.

26. Equipment of an access network (RAN) of a communications network including at least one network controller (BSCn), characterized in that it includes a system (D) according to claim 13.

27. A communications network including an access network (RAN) including at least one network controller (BSCn), characterized in that it includes at least one system (D) according to claim 13.

28. Use of the system (D), the method, the network controller (BSCn), and the access network equipment (RAN) according to claim 1 in cellular communications networks.

29. Use according to claim 28 in cellular communications networks chosen in a group comprising TDMA, CDMA, CDMA-One, PHS and FOMA networks.